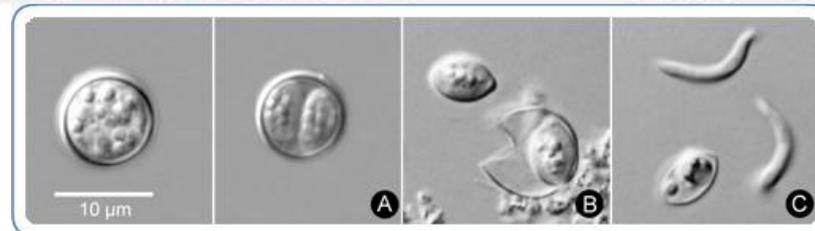


EPI Gram is a monthly publication of the Stark County Public Health Infrastructure Coalition. It contains a summary of provisional communicable disease reports and other key public health indicators, with summary tables for Stark County, Ohio. Some reportable conditions may be under investigation and, at any given time, data may fluctuate from month to month for a specific category.

Monthly Highlight: *Cyclospora cayetanensis*

Stark County has only ever had six cases of Cyclosporiasis. Out of those six cases, four of them were reported during 2016. This single-celled parasite causes gastrointestinal illness in humans. Though none of the cases in Stark county have currently been associated with an national outbreaks, several have occurred involving fresh cilantro from the state of Puebla, Mexico. On August 30, 2016, the United States Food and Drug Administration published an import alert in regards to the fresh cilantro coming from this location. Outbreaks from 2013 and 2014 were documented to be linked to this product and locations. Currently an outbreak from 2015 is still under investigation for the same reason.

Infection occurs through eating or drinking contaminated food or water. The parasite is most often found in tropical and subtropical regions. Most cases in the United States are associated with either travel or imported fresh produce. Person to person transmission is rare because when the parasite passes through the stool it needs time before maturing into sporulated oocysts, the infectious form of the parasite. If an individual consumes the infectious form of the parasite, it will take a person around a week before they experience symptoms. These symptoms include water diarrhea with explosive episodes, abdominal cramps and bloating, weight loss, loss of appetite, nausea, and fatigue. Some also have vomiting and fever as well and others may not have any symptoms as at all. It may last from a few days to a few months. The patient may feel they have gotten better and then have a relapse. Treatment is available.



An unsporulated oocyst, with undifferentiated cytoplasm, is shown (far left), next to a sporulating oocyst that contains two immature sporocysts (A). An oocyst that was mechanically ruptured has released one of its two sporocysts (B). One free sporocyst is shown as well as two free sporozoites, the infective stage of the parasite (C).

Credit: CDC/DPDM.

Table 1 Summary of Air Quality Index, Pollen, and Mold Counts for Stark County, Ohio, including historical data.

	August 2016				September 2015			
	Monthly High	Monthly Low	Monthly Median	Counts in highest reported health risk category	Monthly High	Monthly Low	Monthly Median	Counts in highest reported health risk category
Pollen Count	80	5	12.5	NA	100	1	15	NA
Mold Count	8,360	1,600	3,975	5 (Moderate)	6,130	1,165	2,700	0 (Good)
Air Quality Index	79	30	45	8 (Moderate)	78	10	42.5	5 (Moderate)

**See the following websites for updated Air Quality Index and mold index terminology and color coding: <http://www.airnow.gov/index.cfm?action=aqibasics.aqi> https://pollen.aaaai.org/nab/index.cfm?p=reading_charts. Data source for this table is the Air Quality Division of the Canton City Health Department.

Table 2 Summaries of Select Vital Statistics for Stark County

	August 2016	YTD 2016	2015
Live Births	296	2,058	4,314
Births to Teens	22	156	308
Deaths	373	3,061	4,362

Birth and death data is reported by the four health districts and may include non county residents.

Table 3 Stark County Crude Birth Rate and Death Rates

	2010	2011	2012	2013	2014
Birth	10.8	10.8	10.9	11.2	12.0
Death	10.9	11.3	11.4	11.3	11.4

*Source: Ohio Department of Health Data Warehouse. Rates are per 1,000 population.

Table 4: Jurisdictional Summary of Reportable Diseases in Stark County

	Alliance City		Canton City		Massillon City		Stark County		Total	
	Aug.	YTD	Aug.	YTD	Aug.	YTD	Aug.	YTD	Aug.	YTD
Campylobacteriosis	1	1	4	16	2	3	4	36	11	56
Chlamydia infection	6	74	80	604	18	123	58	444	162	1,245
Creutzfeldt-Jakob Disease	0	0	0	0	0	0	0	1	0	1
Cryptosporidiosis	2	3	2	5	0	2	7	18	11	28
Cyclosporiasis	0	0	0	1	0	0	0	2	0	3
E. coli, Shiga Toxin-Producing	0	0	0	1	0	1	2	8	2	10
Giardiasis	1	2	0	5	0	0	5	14	6	21
Gonococcal infection	3	28	53	290	5	28	15	103	76	449
Haemophilus influenzae	0	0	0	2	0	0	1	2	1	4
Hepatitis A	0	0	1	2	0	0	0	0	1	2
Hepatitis B – acute	0	0	0	1	0	0	0	2	0	3
Hepatitis B - chronic	0	1	1	12	0	2	2	21	3	36
Hepatitis B - perinatal	0	0	0	0	0	0	0	4	0	4
Hepatitis C - acute	1	1	0	3	0	1	1	3	2	8
Hepatitis C - chronic	4	22	13	79	2	25	12	89	31	215
Hepatitis E	0	0	0	0	0	0	0	1	0	1
Influenza-associated hospitalization	0	7	0	47	0	24	0	80	0	158
Influenza-associated pediatric mortality	0	0	0	0	0	0	0	0	0	0
LaCrosse Virus Disease	0	0	0	0	0	0	1	1	1	1
Legionellosis	0	1	0	0	0	0	3	8	3	9
Listeriosis	0	0	0	0	0	0	0	1	0	1
Lyme Disease	0	1	0	2	0	1	0	11	3	15
Malaria	0	0	0	0	0	1	0	0	0	1
Measles - indigenous to Ohio	0	0	0	0	0	0	0	1	0	1
Meningitis - aseptic/viral	0	0	1	3	0	0	1	12	2	15
Meningitis-bacterial (not N. meningitides)	0	0	1	1	0	0	1	3	2	4
Mumps	0	0	0	1	0	0	0	1	0	2
Mycobacterial Disease- other than tuberculosis	0	2	0	3	0	0	4	22	4	27
Pertussis	1	1	0	3	0	5	4	12	5	21
Q fever, acute	0	0	0	0	0	0	0	1	0	1
Salmonellosis	0	1	1	7	1	3	7	22	9	33
Shigellosis	0	1	0	1	0	0	0	1	0	3
Staphylococcal aureus	0	0	0	1	0	0	0	0	0	1
Streptococcal-Group A, invasive	0	0	0	4	0	0	1	3	1	7
Streptococcal-Group B- in newborn	0	0	0	0	0	0	0	1	0	1
Streptococcus pneumoniae - invasive antibiotic resistance unknown or non-resistant	0	1	0	10	0	4	0	14	0	29
Streptococcus pneumoniae - invasive antibiotic resistant/intermediate	0	0	0	5	0	1	0	8	0	14
Streptococcal toxic shock syndrome	0	0	1	1	0	0	0	0	1	1
Syphilis, Total	0	3	0	7	0	1	0	0	0	11
> Primary, Secondary and Early Latent	0	2	0	5	0	0	0	0	0	7
Tuberculosis	0	0	1	1	0	0	0	2	1	3
Varicella	0	1	0	6	0	3	3	15	3	25
Vibriosis (not cholera)	0	0	1	2	0	0	0	1	1	3
Yersiniosis	0	1	2	2	0	0	0	2	2	5
Zika Virus Disease	0	0	0	1	1	1	0	2	1	4
Total	19	149	162	1,122	29	228	135	973	345	2,472

Source: Ohio Disease Reporting System, downloaded 09/7/2016.

Table 5 – Summary Table of Diseases Reported in the Previous 5 years within Stark County (Provisional Data)

	Aug. 2016	Aug. 2015	YTD 2016	YTD 2015	All of 2015	5 Yr Annual Average	5 Yr. Annual Rate
Amebiasis	0	0	0	1	1	0.2	0.053
Babesiosis	0	0	0	1	1	0.2	0.053
Brucellosis	0	0	0	0	0	0.2	0.053
Campylobacteriosis	11	6	56	38	59	61.0	16.235
Chlamydia	162	130	1,245	1,019	1,702	1,539.0	409.596
Coccidioidomycosis	0	0	0	0	0	0.4	0.106
Creutzfeldt-Jakob Disease	0	0	1	0	0	0.6	0.160
Cryptosporidiosis	11	2	28	14	30	29.2	7.771
Cyclosporiasis	0	0	3	1	1	0.4	0.106
Dengue	0	0	0	0	0	0.6	0.160
Ehrlichiosis/ Anaplasmosis	0	0	0	0	0	0.4	0.106
Escherichia coli, Shiga Toxin-Producing	2	9	10	12	17	6.8	1.810
Giardiasis	6	3	21	17	29	36.2	9.634
Gonorrhea	76	52	449	318	530	586.8	156.173
Haemophilus influenzae , Invasive	1	0	4	7	8	7.4	1.969
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	0.2	0.053
Hepatitis A	1	1	2	3	5	5.8	1.544
Hepatitis B, Perinatal	0	1	4	3	5	3.4	0.905
Hepatitis B, Acute	0	1	3	3	4	5.0	1.331
Hepatitis B, Chronic	3	3	36	30	45	33.6	8.942
Hepatitis C, Acute	2	2	8	12	13	7.8	2.076
Hepatitis C, Chronic	31	35	215	241	374	275.8	73.403
Hepatitis E	0	0	1	0	0	0.2	0.053
Influenza-associated hospitalization	0	0	158	281	284	263.6	70.156
Influenza-associated pediatric mortality	0	0	0	0	0	0.2	0.053
LaCrosse virus disease	1	0	1	0	0	0.4	0.106
Legionellosis	3	0	9	15	19	14.2	3.779
Listeriosis	0	0	1	0	1	1.4	0.373
Lyme Disease	3	3	15	13	18	13.6	3.620
Malaria	0	0	1	0	0	0.6	0.160
Measles (indigenous to Ohio)	0	0	1	0	0	1.8	0.479
Meningitis, Aseptic	2	4	15	15	31	35.2	9.368
Meningitis, Other Bacterial	2	0	4	2	3	3.4	0.905
Meningococcal Disease	0	0	0	3	3	1.2	0.319
Mumps	0	0	2	3	4	2.0	0.532
Mycobacterial disease - Not TB	4	2	27	13	36	31.0	8.250
Pertussis	5	0	21	32	51	34.6	9.209
Q fever, acute	0	0	1	0	0	0.4	0.106
Salmonellosis	9	1	33	30	53	41.6	11.072
Shigellosis	0	1	3	5	6	34.4	9.155
Spotted Fever Rickettsiosis	0	0	0	0	0	0.4	0.106
Staphylococcal aureus	0	0	1	0	0	0.0	0.000
Streptococcal Dis, Group A, Invasive	1	3	7	8	9	15.2	4.045
Streptococcal Dis, Group B, in Newborn	0	0	1	0	0	1.6	0.426
Streptococcal Toxic Shock Syndrome	1	0	1	1	1	1.2	0.319
Streptococcus pneumo. – inv. antibiotic resistance unknown or non-resistant	0	1	29	15	29	36.8	9.794
Streptococcus pneumo. – inv. antibiotic resistant/intermediate	0	0	14	12	15	17.8	4.737
Syphilis, Total	0	0	11	5	7	10.4	2.768
> Syphilis, Primary, Secondary and Early Latent	0	0	7	4	5	6.6	1.757
Toxic Shock Syndrome (TSS)	0	0	0	0	1	0.8	0.213
Tuberculosis	1	0	3	1	1	1.0	0.266
Thyphoid Fever	0	0	0	0	0	0.4	0.106
Typhus Fever	0	0	0	0	0	0.2	0.053
Varicella	3	2	25	16	26	29.2	7.771
Vibriosis - other (not cholera)	1	1	3	3	3	1.2	0.319
Vibriosis parahaemolyticus	0	0	0	0	0	0.2	0.053
West Nile Virus	0	0	0	0	1	0.6	0.160
Yersiniosis	2	1	5	4	8	2.8	0.745
Zika Virus Disease	1	0	4	0	0	0.2	0.052

Source: Ohio Disease Reporting System, downloaded 09/7/16. Rates are per 100K population and based on 5 yr average incidence '11-'15.